



Photo: Romulus Whitaker

Irulas: The Snake Trackers

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By **Janaki Lenin**

For the last 10 years, I had been watching the legendary *Irulas* – the snake catching tribe of south India from the periphery. Finally, in 2002, I got my chance to spend a week with them (and what a week it was!). Rom Whitaker was curious as to what effect the *Irula* snake catching cooperative had on wild snakes and so we had come to the Chengalpattu district, where snake-hunting for venom extraction was the most intensive. The fact that the snakes were released after the venom was extracted, (unlike other anti-venom extraction set-ups) also made Chengalpattu the right place to ascertain the effect, if any, of snake trapping on wild snake populations.

Rom's life has long been inextricably tied with the *Irulas* – a tribe he met in the 1970s on one of his snake trips to the south. He was then based outside Mumbai and was extracting venom for the Haffkine Institute. He travelled regularly to Bengal for banded kraits and monocellate cobras, to Ratnagiri for saw-scaled vipers and to Chennai for kraits and Russell's vipers. Harry Miller, a well-known local journalist, put him in touch with the *Irulas*.

Rom was amazed by their skill at snake catching; they could literally 'track down' snakes! He felt much more at home in south India, having schooled in Kodaikanal, and suddenly, for the first time, Rom had

a peer group of snake hunters in India. He soon moved to the outskirts of Chennai near an *Irula* settlement and started India's first snake park. His first business mates were the *Irulas*; their easy sense of humour and Rom's frugal lifestyle complemented each other.

Around the same time, Rom was discovering that the snakeskin industry was hammering snake populations all over the country. At the industry's peak, in 1966, 25,000 snake skins were processed countrywide every day. In an average year, it was still about 17,000 skins per day. So every year, for probably 50 years, six million snakes were being killed for watch straps, belts, shoes and handbags. And this is a conservative estimate. The snakes being killed included cobras, rat snakes, Russell's vipers and pythons. When the large snakes became harder to find, the industry settled for water snakes. The *Irulas* were the largest suppliers of skins. With their incredible tracking skills, the snakes just didn't stand a chance. Rom and other conservationists lobbied hard to have the snakeskin industry shut down and eventually the government listened, declaring the industry illegal in 1975.



Before the snakeskin trade was banned, millions of cobras were killed each year. Photo: Romulus Whitaker.

Overnight, thousands of *Irulas* were without a livelihood. Although Rom felt sorry for them, he never regretted the ban on snakeskins. While drinking toddy and chatting with the *Irulas* in the evenings, Rom grew confident that they could do what he had been doing – extract venom from snakes and sell it

to the anti-venom manufacturers. The idea was to form a tribal cooperative, but this was easier said than done. There were so many legal and bureaucratic gauntlets to run that soon the focus was in danger of being lost. Snakes were now protected by the Forest Department, while venom was construed as a chemical, regulated by the Department of Industries. Neither wanted the cooperative under their jurisdiction. It was an anomaly - the only cooperative utilising wildlife. Finally, it was thanks to the gumption of one lady that the cooperative became a reality at all - Revati Mukherjee. After months of waiting in the corridors of the State Secretariat, Rom was getting despondent. Revati, a good friend and no respecter of obstructive bureaucracy went straight to the top, browbeating the secretaries in charge until they buckled, probably just so they could be rid of her! And thus the cooperative came into being.

It took another four years for the reluctant Forest Department to issue licenses to the cooperative's members. Finally in 1982, the *Irulas* had license to catch the big four venomous snakes - cobras, kraits, Russell's vipers and saw-scaled vipers. The cooperative bought the snakes and extracted venom to sell. At the end of the year, the profits were tallied up and distributed among the 60 members. Venom was extracted thrice in three weeks from each snake. Then, in a unique break from the procedure followed by every other venom facility in the world, the snakes were returned to the wild. In the last two decades, the *Irulas* have caught close to 100,000 snakes. All the snakes have their belly scales clipped in code - year and month of capture and date of release - so that they aren't caught again any time soon. It is important that this does not happen because the snakes need time to feed and recover. The scales eventually grow back obliterating the code but by then the snake has recuperated. In any event, the chances of catching the same snakes are very slim. The *Irulas* hunt along paddy fields, catching rats, mice and snakes. (The farmers are happy to get rid of the pesky rodents as well as the dangerous predators.) After the venom is extracted, the snakes are released in forests; the *Irulas* would probably be lynched if they released the venomous snakes back in the fields where they were originally caught.



This Russell's viper (banner image) at the Irula cooperative will be milked of its venom once a week for three weeks before being released in an uninhabited area. After the ban, Rom Whitaker worked with the Irulas (above) to establish a snake catchers' cooperative to extract venom for the anti-venom industry. Photo by: Janaki Lenin.

So 20 years after the cooperative became operational, Rom decided to have a casual look at the snake populations in the district of Chengalpattu. For a week, we went trudging along rice field bunds, looking for snakes. It was July – the heat was searing. The northeast monsoon was a few months away and the land was parched. We picked up Kali, the son of a legendary *Irula* snake hunter and healer, Chockalingam. Kali had married when he was 18 and already had two children at 22. His hamlet consisted of about 20 huts on the outskirts of the Manamadi village, about 30 km. south of Chennai. They had no electricity; just a lone streetlight that lit the whole village at night. Water was brought from a kilometre away by the women. Hardly any of the kids went to school. Their hair was copper-coloured from malnutrition. All of them were sparsely built from a life of hardwork and poor nutrition. These are among India's poorest people. Most adults work as casual labourers in farms and rice mills. The cooperative could only handle 300 members from a 25,000 strong tribe.

Kali has been hunting snakes since he was 10 years old. At 14, a saw-scaled viper bit him on his forefinger. While he was not in any danger, the pain searing through his finger was so intense and unbearable that he thrust his finger into the fire. He's too embarrassed to talk about the incident so we don't know whether there was any relief from the pain! Now he has a slightly deformed finger. That's one thing I've noticed about most snake hunters – shaking hands with them is like shaking a crab's claw. When I comment on it, Rom reminds me of his adage "Snake hunters never die. They just rot away!" Joking apart, most snake hunters live dangerous lives. There's no such thing as too much concentration or caution when dealing with venomous snakes. There can be no distraction, no hesitation, no mistakes. And as you hunt, you go deeper and deeper into the countryside, and further away from the main road, transport and any possible help.

The remoteness of the location is one thing but Rom's various allergies (to anti-venom serum, to cobra venom, to krait venom...) are complications that we could live without! Thus the constant refrain about concentration.



Ammu and other Irula children start off handling non-venomous snakes such as this red sand boa but they soon graduate to venomous ones. By the time they reach adulthood, snake catching is made to look easy. Photo by: Janaki Lenin.

Rice farmers don't like too many trees. It was a vast flatland of rice fields with small stands of trees, the only shade in the whole landscape. It is to these copses that we headed, looking for tracks and rat burrows along the dykes. When Kali did not pause over several burrows, I asked him why. He nonchalantly replied, "There's nothing in there. It's an old hole." He was looking for fresh tracks, fresh diggings, scat outside the holes and where there were none, he didn't pause for a second glance. To my untrained eyes, I couldn't tell where to look for tracks on a baked earth with dry stalks of grass sticking out all over the place.

It was getting hotter and hotter and it was only 10 a.m. I could have sworn it was 2 p.m. I was exhausted. We had been walking for four hours. We walked along a cotton field. Kali found a burrow with snake tracks. It looked like any other hole to me and I did have my glasses on! And then to add insult to injury, he proclaims that the tracks go in but don't come out. Now how on earth could a slight smoothness on the earth say so much? But Kali was certain and he began digging. Rom found another hole which was

part of the same burrow system, while Raju, Kali's snake hunting partner, scouted around to see if there were any escape routes. I wanted to find the next rat burrow with a snake in it but the heat was making me listless. So, halfheartedly, I walked along an adjoining dyke looking for burrows and tracks while the boys were busy digging. One of them yelled and I raced back – Kali was just handing Rom a young cobra by the tail and he continued digging. He thought there was a second cobra in the same hole. And no prizes for guessing if he was right!



These Irulas have just tracked down and caught an adult cobra. Photo: Romulus Whitaker.

In a ditch overgrown with ipomoea, Kali found a whole clutch of baby Russell's vipers. They were perfect miniatures of the adults! I cannot tell what science caused Kali to believe that tramping around in the ipomoea would lead him to baby vipers. I suppose a combination of skill and several years of hunting knowledge would tell him that this is the season when Russell's vipers drop their babies and when he sees the right habitat, he checks it out. So where I just see a ditch overgrown with ipomoea, Kali sees the ideal hangout for baby vipers. Where I just see a rat hole, Kali sees a cool place where a cobra would want to lie low to beat the heat.

Walking back to the car in the evening, Kali stopped at a palmyra tree and poked around with a stick. A minute later, he pulled out a saw-scaled viper. Now, how did he do that? He couldn't tell me what made him check that particular palm tree and not its neighbour. This was crazy – either he was having us on (he could have come over the previous day and secreted a saw-scaled viper in the tree) or it was some kind of magic. Thinking about it now, maybe Kali caught a movement out of the corner of his eye and investigated. I suppose the trick is also to get under the skin of the snake to figure out where it could be. Rom says snake hunting is actually a systematic search of all possible snake hiding places – literally and figuratively leaving no stone unturned. But even that requires a greater skill than one realises. There's no way I was ever going to learn anything about tracking. Give me sand dunes with big game any day where animal tracks are written as large as bold print!

At the end of our seven-day hunt, we totalled 55 snakes of 10 different species. Rom made it a point to collect shed skins as indicators of relative snake abundance, even ones we didn't see, and the tally was 158 shed skins. For a preliminary survey conducted during the worst time of the year for snakes, it was obvious that the four species of snakes were doing very well indeed, and capture-release methods being followed by the Irulas were having no negative effects on the snake populations. But what we'd really like to do is radio-track some of the snakes that the Irula cooperative releases and insert tags in others so we have an idea of where these released snakes go and what they do. If there is any snake freak out there who's looking for a project, here's one that desperately needs doing.



The Irula cooperative, by extracting venom and releasing the snakes unharmed, has provided members of the community with a livelihood without affecting wild snake populations. Photo by: Romulus Whitaker.

India's Big Four

Cobras, kraits, saw-scaled vipers and Russell's vipers love farmlands where juicy rodents are abundant and accommodation comes free with the food. Cobras live in the ricefield dykes inside rat burrows, venturing out only to find their next meal. It is the commonest venomous snake in India. Kraits love piles of bricks, well tailings, firewood... anything that is piled up. They feed on rats and other snakes and are the most toxic land snakes in Asia. Saw-scaled vipers are more mysterious. These little snakes emerge as though from nowhere after the rains and then completely disappear during the dry season. These cause the most number of venomous snakebites in the world. Russell's vipers tend to hang out in bushy, thorny thickets; agave fence borders are ideal. They are emerging as the primary snake species killed in India.